



SCREENING OF ETHNOMEDICINAL ASPECT OF NILI (INDIGOFEA TINCTORIA LINN.) USED IN DIFFERENT COUNTRIES - A REVIEW STUDY.

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ABSTRACT

Background: Ethnomedicine broadly refers to the study of the traditional medicine practiced by various ethnic groups for the prevention and cure of the ailments. Nili (*Indigofera tinctoria* Linn.) is a perennial shrub that belongs to the Fabaceae family. Traditionally Nili is used as a medicine for various diseases in India. **Material & Method:** Available books were referred for gathering the data regarding Nili. Also, online articles and webpages were referred for this review. **Observation & Result:** Referring various books, articles in detail adds up a vast therapeutics range of Nili. **Discussion:** Nili has wide range of therapeutic application such as in Asthma, epilepsy, snake bite, mouth ulcer, alopecia, hair loss, etc. But it has remained clinically very less explored. **Conclusion:** From this present review study, it can be inferred that more such drugs which are used by ethnics can be explored and can be beneficial to other people once it is scientifically proven.

KEYWORDS: Ethnomedicine, *Nili* (*Indigofera Tinctoria* Linn.), Therapeutics

INTRODUCTION

Ethnomedicine is as old as man's history. From the advent of life, it has been seen that humans are dependent on the mother nature for their livelihood and survival. The evidence of the use of plants as medicine is seen in the fossil record of the middle Palaeolithic period around 60,000 years ago. Tribes in China, India, Romania, and Africa have practiced ethnomedicine from many years. Indigenous people identified various plants with medicinal properties and used them for curing various diseases. They owned the knowledge regarding various plants but it is not documented. It is spread through word of mouth from one person to other. So, there is a need to gather the data regarding these herbs which are undocumented and used by tribes. If data regarding these plants is collected and scientifically proved then it can be documented and can be beneficial to other people too. It is also mentioned in *Charaka Samhita* that the those who resides in a forest, who are shepherds are endowed with the knowledge of plants¹.

ओशधीर्नामरूपाभ्यां जानते ह्यजपा वने ।
अविपाश्चैव गोपाश्च ये चान्ये वनवासिनः । । (च. सू. 1/121)

According to WHO also, around 80% of the world's population is estimated to use traditional medicine. So here in this present paper Nili is selected for the review of its traditional uses. *Nili* has been used from the ages as a natural source of dye (Indigo). But it has broad therapeutic values too other than the source of dye. Botanical name of *Nili* is *Indigofera tinctoria* Linn. and belongs to the Fabaceae family.

MATERIALS

Books, online articles and webpages were referred for gathering the data regarding the traditional use of *Nili*. References of *Nili*

are available from the books mentioned in the below table.

Sr. No.	Name of the book	Author
1.	India Folk Medicine ³	P.C. Trivedi
2.	Ethnomedicinal Plants of India ⁴	P.C. Trivedi
3.	Indigenous ethnomedicinal plants ⁵	P.C. Trivedi
4.	Indian folk medicines and other plant-based products ⁶	V. Singh.
5.	Indian Medicinal Plants ⁷	K.R. Kirtikar, B.D. Basu

Table no. 1: References of Nili observed in different books

METHODS:

All the data regarding Nili was gathered from the above-mentioned books and online articles. Then it is systematically categorized, arranged and according to it the observations and results are given below in the table.

OBSERVATIONS & RESULT:

Plant part	Country/Region/Tribes	Administration details	Traditional use
Whole plant	India	Decoction	Hepatoprotective, hypoglycemic, leucorrhoea, burns, ulcers, epilepsy, asthma, lumbago, gout, nerve, piles, Snake bite and scorpion sting
		Juice	Asthma, whooping cough, heart palpitations, lung diseases and kidney complaints
		Powder	Cold, cough
		-	Boils, bronchitis, epilepsy, nervous disorders, ulcer, Helminthic infections

	India, China	-	Epilepsy, nervous disorders
		-	Skin diseases, gastropathy, nerve tonic to improve the brain function
	Kanikkars tribes, Tamil Nadu (India)	The juice prepared from 10g of whole plant with 200ml of Goat's milk is taken orally three times for a period three days	leucorrhoea
		Burkina Faso	Decoction
Plant extract	People of south Travancore (India)	-	Antidote
Young twigs	India	Juice mixed with honey	Mouth ulcer
Leaves	India	Juice, taken orally, 15 ml daily for a week/ Powder	Asthma
		Decoction	Venomous insect bites, burns and scalds
		Crushed, poultice or plaster externally applied	Stimulant, skin affections, haemorrhoids, wound and ulcer cleaning
		Paste mixed with castor oil, heated, filtered and cooled. External application on the affected regions of the scalp	Alopecia and hair loss
		Paste, topical application	Snake bites
		Juice	Dropsy, Hydrophobia
	Oman	-	Cleaning and treating wounds
	Cambodia	Decoction	Bleemorrhagia
	Sri Lanka	Leaves are pounded and juice is extracted by squeezing. Oil for applying on head is prepared with aforesaid juice	Promote hair growth
	Local people of Kulathur, Tamil Nadu (India)	Decoction is made and taken orally twice daily for a week.	Antidote & Body pain
	U.P. (India)	Juice applied over scalp once a day, half an hour before bath.	Hair Loss
	Chhattisgarh (India)	-	Fever, wounds, Eye disease and Liver disorder
	Groups of Valaiyans, Tamil Nadu (India)	Used as Decoction	Skin diseases
	India, China	Juice mixed with honey, taken orally	Liver and spleen enlargement
	Guntur (India)	-	Obesity, Teeth infection and Asthma
	-	Leaves juice mixed with honey and consumed orally	Splenomegaly
	India	A glassful of leaf juice administered in the morning with milk for 3 days.	Dog Bite
	China	-	Inflammation, psoriasis
		Fresh leaves	Scabies
	India	Powder, topical application	Leprosy
		Decoction	Kidney stones
		Powder, taken orally	Dropsy
		-	Hair growth, Scorpion sting
	-	Juice of Roots	Antidote for scorpion bite
	Chhattisgarh (India)	-	Fever, wounds, Eye disease and Liver disorder
	Madhya Pradesh (India)	-	Urinary disorder
	Mundas of Chota Nagpur (India)	Roots are pounded and macerated in water	Urinary complaints

	Burkina Faso	Fresh roots boiled, mouthwash	Toothache, gingivitis, sores
		Maceration	Anti-inflammatory, healing, skin diseases
Stem	China	-	Inflammation, psoriasis
Seeds	Jaipur (India)	Seeds are consumed raw.	Used as a famine food by the people of Jaipur.
Flower	Gujarat (India)	Extract of flowers is applied on hairs.	Greying of hair
	Maharashtra (India)	Paste of flowers	Burn
-	Oman	-	wounds, cuts, narcotic, tonic, anticancer and goitre, Skeletal-muscular problems, Dermatological and topical diseases
		Mixed with castor oil and applied to the navel of children	Promote the bowel action
	India	Applied on the pubes	Bladder stimulation in cases of urine retention

Table no. 2: References of Nili used as ethnomedicine (3,4,5,6,7, , , , , , ,)

DISCUSSION

Through this present review study information regarding wide range of therapeutic application of *Nili* such as in Asthma, epilepsy, snake bite, mouth ulcer, alopecia, hair loss, etc. has been compiled. Various therapeutic indication of different parts of *Nili* along with its way of administration is mentioned. For example, whole plant is used in burns, ulcer, gout, leaves are used in asthma, alopecia, Stem is used in psoriasis, flower are used in greying of hair. Also, different parts of the *Nili* are used as a different dosage form such as decoction, powder, juice, paste, etc. Some parts of *Nili* are also consumed in a raw form. For example, in China leaves of *Nili* are consumed for the treatment of Scabies. *Nili* is used in different parts of India and other countries such as China, Oman, Sri Lanka, etc. In India *Nili* is used by various tribes of different states as ethnomedicine. For example, Groups of Valaiyans (Tamil Nadu), Kanikkars tribes (Tamil Nadu) use *Nili* as an ethnomedicine in skin disease and leucorrhoea respectively. But till date it has remained clinically less explored.

CONCLUSION

The present paper includes ethnomedicinal information about *Nili*, its useful parts, mode of administration, and region or country where it is used. These data can be useful for further analytical, experimental and clinical study and the result of this data can be documented for the further use. From this present review study, it can be inferred that more such drugs which are used by ethnics can be explored and can be proved beneficial to other people once it is scientifically proven.

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